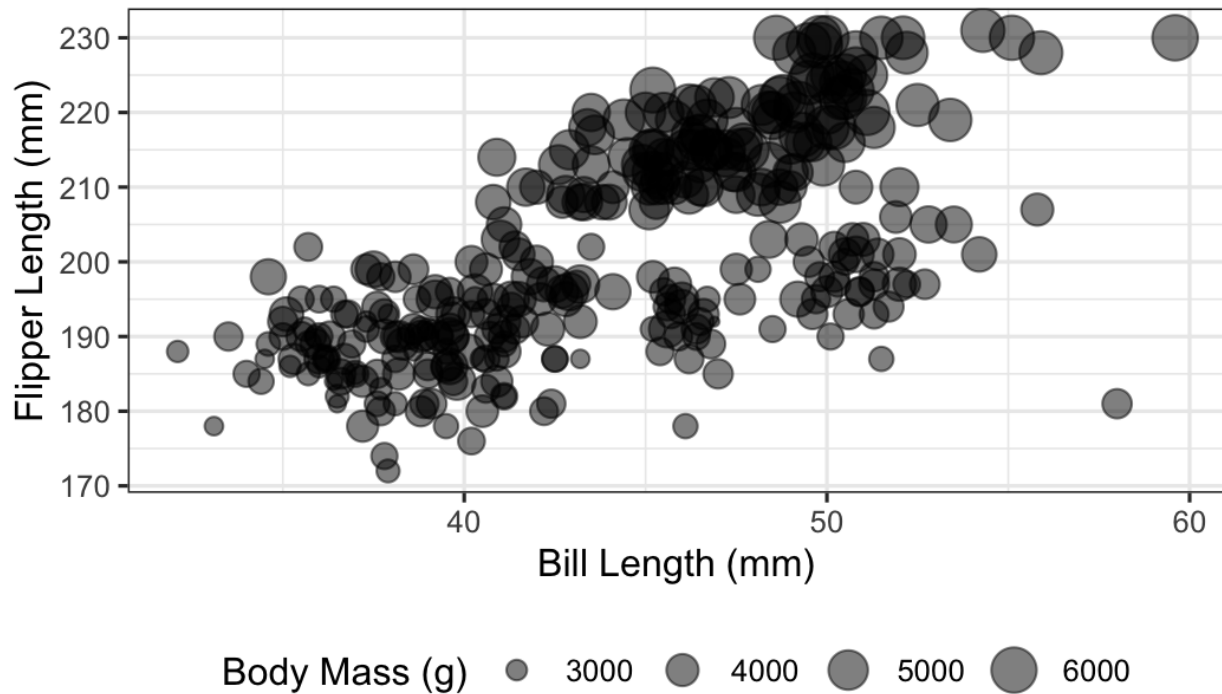


Bubble Plot

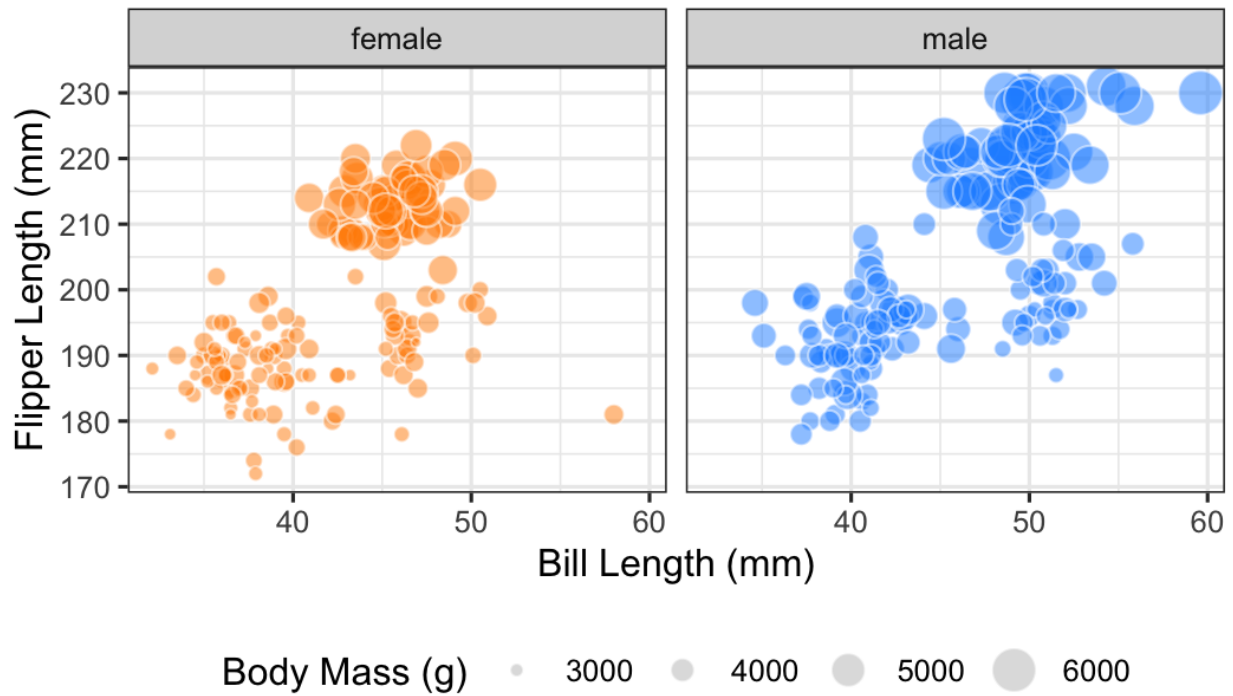
```
ggplot(penguins_complete,  
       aes(x = bill_length_mm,  
           y = flipper_length_mm,  
           size = body_mass_g  
       )) +  
  geom_point(alpha = 0.5) +  
  labs(x = "Bill Length (mm)",  
       y = "Flipper Length (mm)") +  
  scale_size(name = "Body Mass (g)") +  
  #scale_radius(name = "Body Mass (g)") +  
  theme(legend.position = "bottom")
```

*alpha = 0.5 makes the points transparent and bubbles



Multi-faceted Bubble Plot

```
ggplot(penguins_complete, aes(x = bill_length_mm,
                              y = flipper_length_mm,
                              size = body_mass_g,
                              fill = sex
                              )) +
  geom_point(alpha = 0.5, pch = 21, color = "white") +
  facet_wrap(~sex)+
  scale_fill_manual(values = c("darkorange", "dodgerblue"), guide = 'none') +
  scale_radius(name = "Body Mass (g)",
              guide = guide_legend(override.aes = list(fill = 'white',
                                                         size = 3000))) +
  labs(x = "Bill Length (mm)",
       y = "Flipper Length (mm)") +
  theme(legend.position = "bottom")
```



color=white is color of the outline of each point

facet_wrap(~sex) it divides the data into 2 main categories (female and male)

Multiple Plots

```
#corruption_2013 <- corruption[which(corruption$year==2013),]
ggplot(data = corruption,
       mapping = aes(
         x = cpi,
         y = hdi
       )) + geom_point(alpha=0.4, aes(color=region))
+ geom_smooth(color="black")+
labs(x="CPI", y ="HDI", color="Regions") + facet_wrap(~year)
```

